

# NORTHWEST MOSQUITO ABATEMENT DISTRICT

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## ***Mosquito Update***

August 26, 2011

### **PRESENT CONTROL STATUS:**

#### *NUISANCE MOSQUITOES*

New Jersey Light Trap captures of our floodwater mosquito (*Aedes vexans*) continue to remain below our threshold level. Areas surrounding forested habitats may support higher numbers. Floodwater mosquito numbers may slightly increase after this weekend from previous week rainfalls but it is not likely it will be significant since diapause is beginning due to the shorter day lengths and cooler evening temperatures and the mosquitoes stop laying eggs. **FIG 1** shows floodwater mosquito counts in comparison to the similar 2010 high precipitation year.

Crews continue larviciding floodwater areas with methoprene pellets (Altosid) and Agnique MMF-G to reduce their numbers.

#### *CULEX MOSQUITOES*

*Culex* Mosquito numbers per our gravid traps indicate they are increasing due to a return to normal temperatures and additional stagnant water habitats created by the periodic rainfalls (**FIG 2**). Because we continue to detect West Nile infected *Culex* mosquitoes and increasing reports from the public, villages & cities, health departments of dead birds the threat of WNV transmission to humans continues to increase. In the similar 2010 WNV year most human WNV infections occurred in the latter half of August through the 1<sup>st</sup> half of September in NE Illinois.

Crews will be treating stagnant water areas with methoprene pellets (Altosid).

*Director's Note:* NWMAD crews have inspected over 37,000 bodies of water since the beginning of May. Over 9,000 bodies of surface water have been found infested with mosquitoes and were treated. Additionally, the District inspects and treats hundreds more water sources like: neglected swimming pools, construction-stalled building foundations, stagnant creeks, and miscellaneous newly created flooded low areas and ditches. 70,000 street and off-road catch basins have been treated. NWMAD normally treats surface water sites every 7-10 days but due to the severe flooding and continued rains producing more mosquitoes efforts continue to be challenging.

### **MOSQUITO VIRUS SURVEILLANCE IN ILLINOIS:**

Currently, **72** mosquito batches collected from gravid traps have tested positive for WNV thus far in NWMAD. **680** batches of *Culex* mosquitoes were tested for West Nile virus using the RAMP. All in-house arboviral testing will also be tested with RT-PCR via the Illinois Natural History Survey at the Prairie Research Institute of the University of Illinois, Urbana-Champaign.

## **THE RISK OF WEST NILE VIRUS TRANSMISSION TO HUMANS IS INCREASING BASED ON WIDESPREAD DETECTION OF THE VIRUS AND INCREASING NUMBERS OF *CULEX* MOSQUITOES!**

*People 50 years old and older and those individuals with compromised immune systems are at greatest risk from WNV. According to the Illinois Department of Public Health, "Only about two people in 10 who are bitten by an infected mosquito will experience any illness. Illness from West Nile is usually mild and includes fever, headache and body aches, but serious illness such as encephalitis, meningitis and death are possible".*

WE ADVISE ALL RESIDENTS AND BUSINESSES TO EXAMINE THEIR PROPERTIES FOR STAGNANT WATER THAT PRODUCES THESE MOSQUITOES THROUGH THE MONTH OF SEPTEMBER! Examples of mosquito production areas encountered by homeowners can be viewed at: [http://www.nwmadil.com/breeding\\_sites1.htm](http://www.nwmadil.com/breeding_sites1.htm). RESIDENTS NEED TO PROTECT THEMSELVES FROM BITING MOSQUITOES BY USING REPELLENTS (see below) AND BY AVOIDING PRIME MOSQUITO BITING TIME AROUND SUNSET AND ESPECIALLY EVENINGS WITH WARMER TEMPERATURES.

Mosquito batches testing positive for mosquito viruses in NWMAD will be posted at the following website address: <http://www.nwmadil.com/WNVTEST2011.htm>.

The Illinois Department of Public Health reports:

Human WNV cases: Cook (1-Palatine, 1-Chicago, 1-South Holland), 1-Franklin County.

Bird WNV infections: 7

Batches of infected mosquitoes: 335

Illinois Counties with WNV detected: 15 (humans, birds, mosquitoes, other)

More information about WNV infected humans, mosquitoes and animals can be found on the Illinois Department of Public Health's (IDPH) website: [www.idph.state.il.us/envhealth/wnv.htm](http://www.idph.state.il.us/envhealth/wnv.htm) or by calling 217-782-5830.

The State's website also has other valuable resource links on WNV, pesticides and mosquito control.

### **ADULTICIDING:**

Adulticiding (night spraying for the biting mosquitoes) is continuing weather permitting. Adulticiding in 2011 was performed on 6/20, 8/3, 8/4, 8/5, 8/10, 8/11, 8/15, 8/16, 8/22, 8/25, thus far. Adulticiding will continue in areas where we continue to detect West Nile virus in the mosquitoes and where *Culex* mosquito populations are most abundant.

Check night time mosquito spraying schedules for details: [http://www.nwmadil.com/nitespry\\_map.html](http://www.nwmadil.com/nitespry_map.html). If we intend to spray in the evening schedules are posted after 2 PM and generally begins at or shortly after sunset.

### **NWMAD WEBSITE:**

The NWMAD website ([www.nwmadil.com](http://www.nwmadil.com)) has additional information on homeowner mosquito control practices. This Mosquito Update newsletter is available at this site as well as information on the history of NWMAD, personnel contacts, mosquito information links, employment opportunities and mosquito spray schedules.

Report 10-day or longer standing water problem: [http://www.nwmadil.com/water\\_source\\_rpt.htm](http://www.nwmadil.com/water_source_rpt.htm)

Report sick/dead birds or other animals: [http://www.nwmadil.com/Dead\\_Birds.html](http://www.nwmadil.com/Dead_Birds.html) or to the Cook County Department of Public Health at: (708) 633-8025

Check night time mosquito spraying schedules: [http://www.nwmadil.com/nitespry\\_map.html](http://www.nwmadil.com/nitespry_map.html)

Recommended effective barrier sprays, larvicides & mosquito repellents:

[http://www.nwmadil.com/pest\\_products.htm](http://www.nwmadil.com/pest_products.htm)

### REDUCING THE RISK OF MOSQUITO BITES/DISEASE:

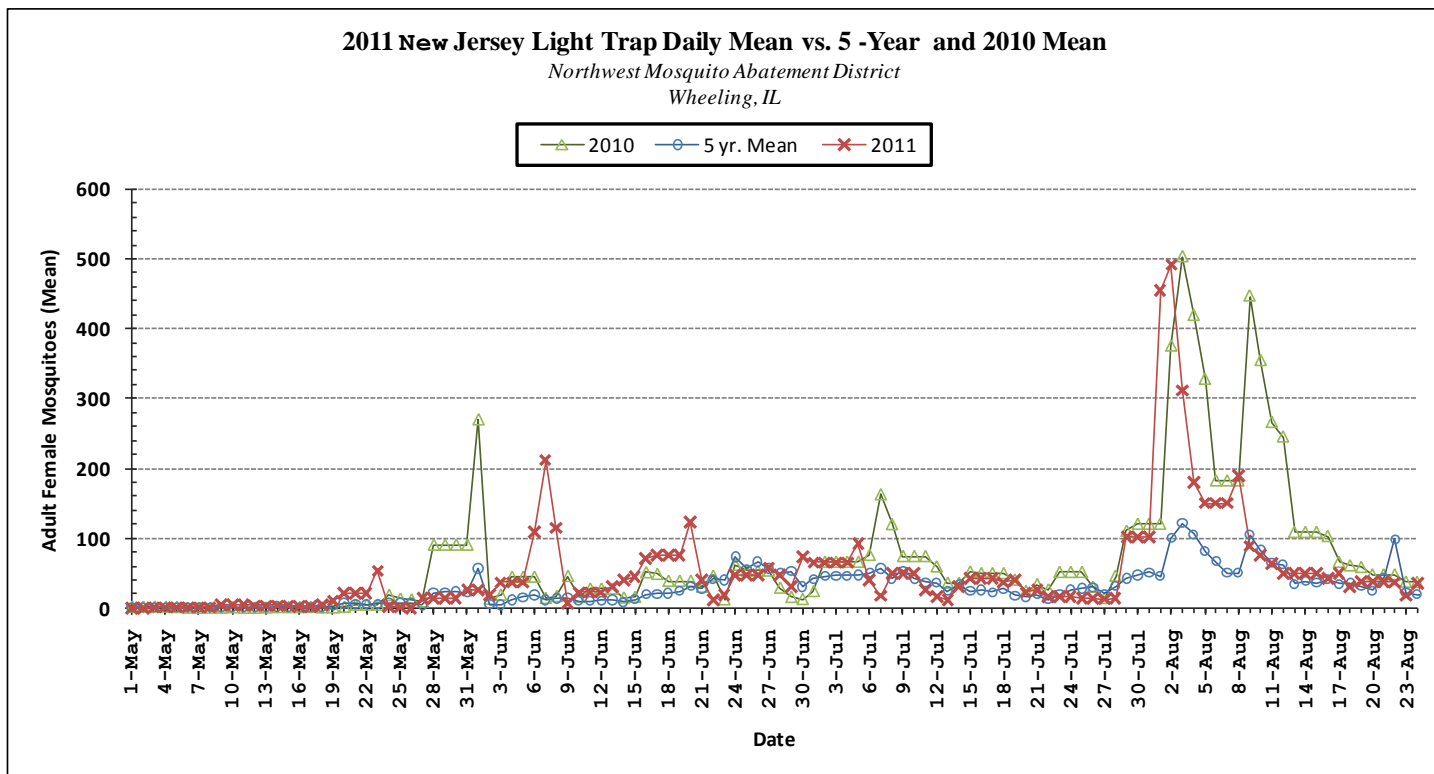
As temperatures increase avoid outdoor activity if possible from dusk to dawn when the mosquitoes bite the most. If you do go out wear light colored, loose fitting, protective clothing and insect repellent (use repellents containing DEET or picaridin & always read label warnings and directions). Make sure mosquitoes do not enter homes through unscreened or broken doors or windows. Residents are encouraged not to create mosquito harborage or resting areas. Make sure tall grassy areas are trimmed and other unnecessary vegetation is cut back. If plants must be watered do so in the morning so the vegetation and soil has a chance to dry making it less attractive to mosquitoes. Empty any containers holding stagnating water for 7 days or longer like: tire casings, birdbaths, flowerpots and rain barrels that may produce mosquitoes. Neglected swimming pools and vegetation clogged rain gutters may produce thousands of mosquitoes. Call the District to report large stagnant water areas that remain wet for more than 7 days.

Mike Szyska

Director

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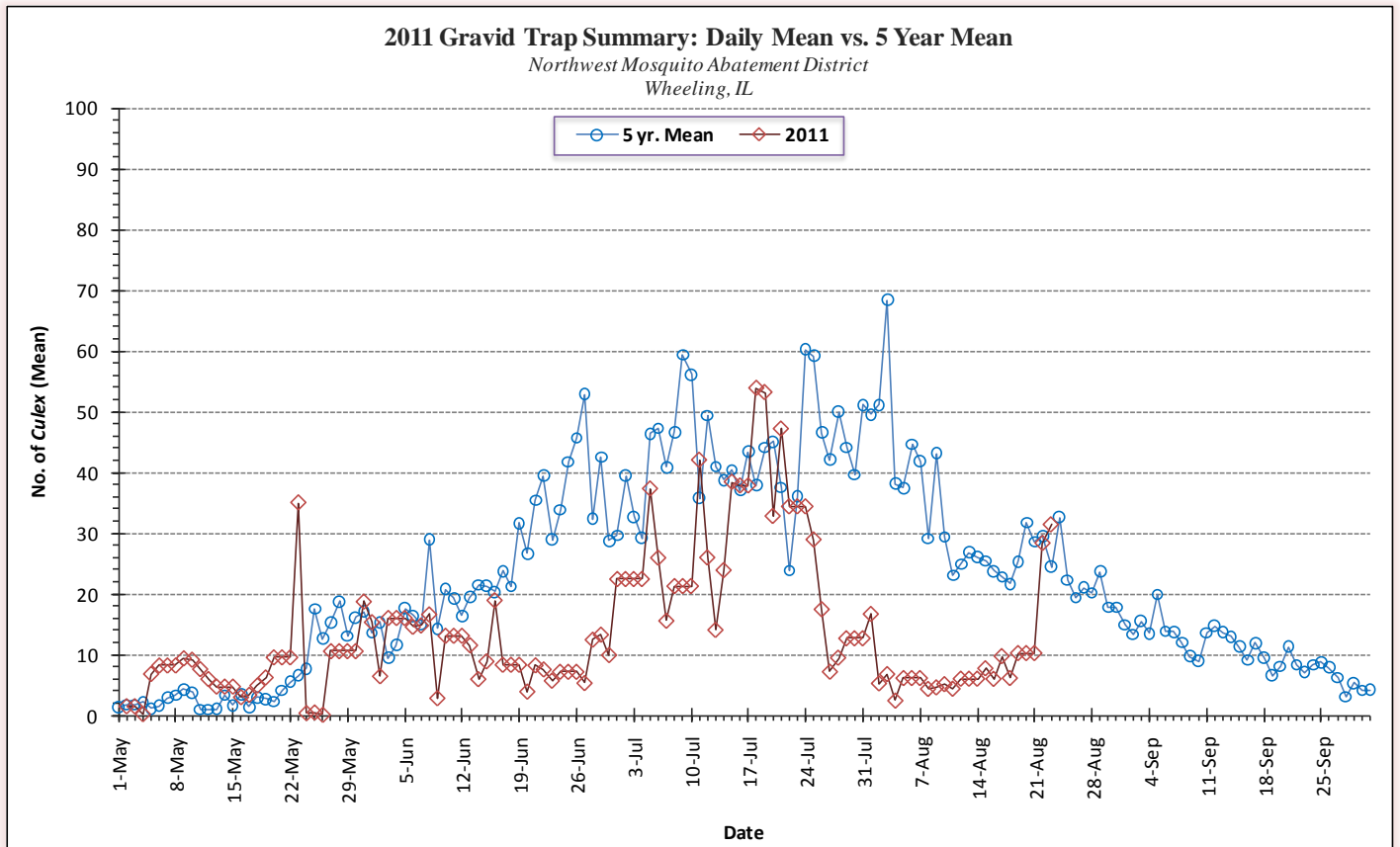
*PLEASE FORWARD THIS INFORMATION TO APPROPRIATE DEPARTMENTS AND AGENCIES.*



**FIG. 1**

New Jersey Light traps best show nuisance floodwater mosquito populations since they are the predominant mosquito collected in these traps. The 2011 mosquito season is remarkably similar to 2010 (see graph above) which was also a high rainfall year. The continued gradual decline despite additional rainfalls indicates the

floodwater mosquitoes are starting to enter a state of diapause in preparation for the coming shorter day lengths and cooler temperatures. That and continued control efforts will reduce their numbers. Floodwater mosquitoes may continue to bite until the first hard frost kills them off. Areas of high dense vegetation will retain these mosquitoes longer.



**FIG. 2**

Gravid traps collect *Culex* mosquitoes that are most likely to transmit West Nile virus to humans and animals. Flooding events and the return of warm & dry weather conditions (typical in August) that develop stagnant water habitats for the aquatic mosquito larvae will rapidly increase their populations increasing the risk of West Nile virus to humans. This is all very dependent on prevailing weather conditions!